

AMENDMENT TO THE DRAWINGS

The attached sheets of drawings include changes to Figs. 5(a), 5(b) and 7.
The sheets, which include Figs. 5(a), 5(b) and 7, replaces the original sheets
including Figs. 5(a), 5(b) and 7.

Attachment: Replacement Sheets, 2 pages
Annotated Sheets Showing Changes, 2 pages

REMARKS

Applicant would like to thank the Examiner for the careful consideration given the present application. The application has been carefully reviewed in light of the Office action, and amended as necessary to more clearly and particularly describe the subject matter which applicant regards as the invention.

Summary of Changes Made

Specifically, claims 7, 8, 13-15, 24, 27, 28, 33, 37, 39, 40, 54, 55, 62 and 63 have been amended. Claims 18 and 19 have been canceled. The specification has been amended in three places. Two replacement sheets of drawings have been submitted to amend Figs. 5(a), 5(b) and 7. Accordingly, claims 1-4, 7-17, 22-28, 33, 37 and 39-63 are presently pending in the application. No new matter has been added to the application by this Amendment.

Drawings

In the prior Office Action, the Examiner objected to the drawings on several grounds. In response to the Examiner's objections, applicant has submitted replacement sheets that include amendments to Fig. 5(a), Fig. 5(b) and 7. Figs. 5(a) and 5(b) have been amended to include reference number 17. And, Fig. 7 has been amended to change the replace the word "state" with the word "condition" in step boxes ST21 and ST23.

The specification has also been amended such that ST13 shown in Fig. 6 is now mentioned in the paragraph that begins on page 54, line 7. In addition, the paragraph beginning at page 54, line 26 has been amended to discuss the

information disclosed in Fig. 7. And, the specification has been amended such that reference number 118 shown in Fig. 16 is now mentioned in the paragraph that begins on page 80, line 26. In view of the amendments to the drawing figures and specification, reconsideration of the prior objections to the drawing figures is respectfully requested.

Specification

The Examiner objected to the disclosure in the prior Office Action because the prior art references identified and listed in the specification were not easy to reference. By this Amendment, the prior art references, by author and title, have been inserted into the specification.

Claim Rejections 35 U.S.C. §112

In the prior Office Action, the Examiner rejected claims 7, 8, 14, 15, 27, 28, 33 and 63 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Examiner noted that in all of the mentioned claims, both the chorus parts/sections and repeated parts/sections were claimed, but were considered to be claiming the same thing.

In this Amendment, applicant has amended claims 7, 8, 14, 15, 27, 28, 33, and 63 to clarify that the repeated parts/sections are different from the chorus parts/sections. Such claims now clarify that the plurality of characteristic music structure sections include a plurality of chorus sections indicative of chorus parts of a

piece of music, and a plurality of repeated sections indicative of repeated parts of the music except for the chorus sections.

Claim 24 was rejected under 35 U.S.C. §112, second paragraph, on grounds that there was insufficient antecedent basis for the limitation "the one or more chorus section selection buttons." To overcome this basis for rejection, claim 24 has been amended to delete the word "chorus section" from the phrase "the one or more chorus section selection buttons."

In the prior Office Action, the Examiner also contended that the phrase "being so constructed" in claims 33 and 54 was relative and rendered the claim indefinite. By this Amendment, claims 33 and 54 have been amended to delete the phrase "being so constructed as" and replace the phrase with "being constructed to." The claims no longer contain relative terms.

Claims 37, 39, and 40 were objected to as being incomplete for omitting essential steps. By this Amendment, claims 37, 39 and 40 have been amended to include the steps of the method.

Finally, claims 54 and 55 were rejected as being incomplete for omitting essential steps, namely, the playback step for which the program is intended. Applicant respectfully traverses the rejection on grounds that the playback step is not essential and does not need to be claimed.

Claim Rejections - 35 U.S.C. §101

In the prior Office Action, the Examiner rejected claims 33, 54 and 55 under 35 U.S.C. §101 on grounds that the claimed invention lacked patentable utility. The Examiner noted that the claims were directed to a computer program per se, but did

not claim a medium on which the program resides. By this Amendment, claims 33, 54 and 55 have been amended to claim a computer-readable medium.

Reconsideration of the rejection under 35 U.S.C. §101 is respectfully requested.

Claim Objections

In the prior Office Action, claims 18 and 19 were objected to as being of improper dependent form for failing to further limit the subject matter of a previous claim. By this Amendment, claims 18 and 19 have been canceled, thereby rendering the prior objection thereto moot.

Claims 13, 14, 27, 62 and 63 were objected to because the claims repeated elements claimed in the independent claims from which they depend. By this Amendment, the repeated elements have been deleted.

Claim Rejections - 35 U.S.C. §102

In the prior Office Action, the Examiner rejected claims 1-4, 7-10, 13, 15-19, 22, 23, 26-28, 33, 37, 39, 40, 56-59, and 62 under 35 U.S.C. §102(e) as being anticipated by Herley, U.S. Pat. App. Publ. US 2004/0001161. The Examiner contends that, in terms of claim 1, Herley teaches a playback device and method which specifies multiple musical data structure sections. Applicant respectfully believes the Examiner is in error.

The repeating object controller (ROC) disclosed in Herley is not used to identify an arbitrary characteristic music structure section in the music audio data and to change the playback position in the music audio data to this arbitrary characteristic music structure section. Paragraph [0011] of Herley reads "Many

media streams contain “objects” that repeat. Repeating objects in a media stream are defined as any section of non-negligible duration, i.e., a song, video, advertisement, jingle, etc., which would be considered to be a logical unit by a human listener or viewer. For example, an audio stream derived from a typical pop radio station will contain, over time, many repetitions of the same objects, including, for example, songs, jingles, advertisements, and stations identifiers.” The repeating object controller of Herley is directed to repeating objects, for example, songs, jingles, advertisements repeated in the media stream such as radio broadcasting.

The present invention is directed to objects to be played back, namely, characteristic music structure sections in a piece of music in respect of the music audio data to be played back. Thus, the invention as claimed is different from Herley.

The ROC of Herley is used to perform various actions described in paragraph [0119] of Herley in association with a particular repeating object (e.g. songs, jingles, advertisements, and station identifiers). As is clear from the description of actions in paragraph [0119], any of the actions described in paragraphs [0120] through [0135] does not teach or suggest that an arbitrary characteristic music structure section is identified in the music audio data and the playback position in the music audio data is changed to the identified arbitrary characteristic music structure section.

Paragraphs [0016] and [0076] of Herley read “For example, in addition to providing a useful technique for gathering statistical information regarding media objects within a media stream, automatic identification and segmentation of the media stream allows a user to automatically access or control particular content within the stream, or, conversely, to automatically bypass or replace unwanted content in the media

stream.” Paragraph [0175] of Herley reads “Further, in one embodiment, this object database also stores statistical information regarding repeat instances of objects, once found.” However, applicant could not find any specific or explicit description of what is “statistical information”. Herley does not teach or suggest the “statistical information” in “the plurality of characteristic music structure sections are identified based on statistical data on playback behaviors of the plurality of trial listeners who played back the music audio data to be played back” which is defined in claim 1 of the present invention. The present invention as claimed in claim 1 is characterized by the specific statistical data. In conclusion, Herley does not teach or suggest any features defined in claim 1.

Applicant further notes that, contrary to the Examiner's assertions, Herley does not refer, in his specification and drawings, to an interface which “allows for the selection of one of said structure sections.” Herley does not disclose an interface which allows the user to freely select one section among a plurality of arbitrary characteristic music structure sections. Claim 2 of the present invention is patentable over Herley for the reasons that claim 1 is patentable over Herley.

Herley also does not disclose, teach or suggest that a single chorus section is selected among a plurality of chorus sections contained in a piece of music. As described above, the repeating object of Herley is a piece of music itself, not a chorus section in a piece of music. Therefore, Herley does not teach or suggest any features defined in claims 3 and 4 of the present invention.

Claim 7 of the present invention claims “a length of the music audio data along a time axis, a playback position, and the plurality of characteristic music structure sections are displayed in the graphic display portion 15 of the interface 13.”

This limitation also appears in claim 8. The second segment 10 of Herley is not indicated in the display of the interface. Paragraph [0041] of Herley reads "In this embodiment, the user need not listen to or watch the entire object; for example, he might be presented with a 10 second representative segment and then make the decision whether to associate any action with the object based on the content of that segment." As is clear from these clauses, Herley does not teach or suggest any features defined in claims 7 and 8 of the present application. Claims 9, 10, 13, 58, 59 and 62 depend from claims 7 or 8, either directly or through an intervening claim, and are patentable over Herley for the same reasons that claims 7 and 8 are patentable over Herley.

With respect to claim 15, Herley does not disclose any graphic display portion that displays "a length of the music audio data along a time axis", "a playback position", and "the plurality of characteristic music structure sections" which, in the claimed invention, are displayed in the graphic display portion 15 of the interface 13, as shown in Fig. 2A and Fig. 5A. Herley, at paragraphs [0016], [0022] and others indicated by the Examiner, does not refer to the graphic display portion. Thus, claim 15 is patentable over Herley. Claims 16, 17, 22 and 26 depend, either directly or through an intervening claim, from claim 15 and are thus patentable over Herley for the same reasons that claim 15 is patentable over Herley.

With respect to claims 33 and 39, Herley does not disclose any graphic display portion that displays "a length of the music audio data along a time axis", "a playback position", and "the plurality of characteristic music structure sections" which, in the present invention, are displayed in the graphic display portion 15 of the

interface 13, as shown in Fig. 2A and Fig. 5A. Thus, claim 39 is patentable over Herley.

With respect to the rejection of claims 37 and 39, applicant notes that Herley does not provide any specific or explicit description of "statistical information." Herley does not teach or suggest the "statistical information" in "collecting statistical data on playback behaviors of trial listener who have played back the music audio data to be played back" as claimed in amended claim 37. Therefore, Herley does not teach or suggest any features defined in amended claim 37. Claim 39 depends from claim 37 and is patentable over Herley for the same reasons as claim 37.

Finally, with respect to claim 40, applicant notes that Herley's paragraphs [0025] and [0034] do not disclose "the data are made visually recognizable as a histogram, and the plurality of characteristic structure sections are identified from the histogram" which is a feature of claim 40 of the present invention. As histogram examples according to the present invention are shown in Figs. 2B and 2C, the histogram shows the stored record which indicates how many times, in total, a plurality of users have played back a particular section in a piece of music. Herley's paragraphs [0025] and [0034] do not teach or suggest that frequency data is used to identify the plurality of characteristic structure sections. As is known from [0025], Herley's frequency data refer to "frequency content of particular frequency bands". In other word, Herley's frequency data is a concept associated with "frequency spectrum". Therefore, claim 40 is patentable over Herley.

Claim Rejections - 35 U.S.C. §103

In the prior Office Action, the Examiner rejected 11, 12, 14, 24, 25, 27, 60, 61, and 63 under 35 U.S.C. §103(a) as being unpatentable over Herley in view of Nakai, U.S. Pat. No. 5,737,308. Applicant notes that neither Herley nor Nakai teaches or suggests a feature defined in claim 7, upon which both of claims 11 and 12 are indirectly dependent. The feature of claim 7 is defined as “a length of the music audio data along a time axis, a playback position, and the plurality of characteristic music structure sections are displayed in the graphic display portion 15 of the interface 13”, as shown in Fig. 2A and Fig. 5A. Neither Herley nor Nakai discloses that a length of the music audio data along a time axis, a playback position, and the plurality of characteristic music structure sections are displayed in the graphic display portion, and such references do not teach or suggest that selection buttons are provided in an interface, as is defined in claims 11 and 12 of the present invention. Clearly, claims 11 and 12 are patentable over the combination of Herley and Nakai.

As noted by the Examiner, claim 14 depends from claim 13 and includes the elements discussed above in claims 11 and 12. Thus, claim 14 is patentable over Herley and Nakai for the same reasons that claim 13 is patentable over such references and further for the same reasons that claims 11 and 12 are patentable over such references. Similarly, the elements set forth in claims 24, 25, 27, 60, 61, and 63 are substantially the same as the elements set forth in claims 11, 12, and 14 which are indirectly dependent upon claims 8 and 15. Since claims 8 and 15 are patentable, claims 24, 25, 27, 60, 61, and 63 are accordingly patentable. Reconsideration of the prior rejections is respectfully requested.

Allowable Subject Matter

In the prior Office Action, the Examiner indicated that claims 41-53 were allowed and that claims 54 and 55 would be allowable if rewritten or amended to overcome the rejections under 35 U.S.C. §101 and 112, second paragraph. By this Amendment, claims 54 and 55 have been amended to overcome the rejections and are deemed to be in allowable condition.

Conclusion

In light of the foregoing, it is respectfully submitted that the present application is in a condition for allowance and notice to that effect is hereby requested. If it is determined that the application is not in a condition for allowance, the Examiner is invited to initiate a telephone interview with the undersigned attorney to expedite prosecution of the present application.

If there are any additional fees resulting from this communication, please charge same to our Deposit Account No. 18-0160, our Order No. NIS-16068.

Respectfully submitted,

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